

The Jungle cat, *Felis chaus* Güldenstaedt, 1776, in Jordan

By D. KOCK, D. M. SHAFIE, and Z. S. AMR

Forschungsinstitut Senckenberg, Frankfurt a. M., Germany, Yarmouk Natural History Museum, and
Jordan University of Science and Technology, Irbid, Jordan

Receipt of Ms. 1. 2. 1993

Acceptance of Ms. 29. 3. 1993

The Yarmouk Natural History museum, Irbid, Jordan, exhibits a mounted female cat, which a visiting mammalogist identified as desert lynx, *Felis* (*Caracal*) *caracal* Schreber, 1776. However, upon inspection in the collection (5. V. 1992), this cat immediately distinguished itself as *Felis* (*Felis*) *chaus* Güldenstaedt, 1776 by its black markings on forelegs, black bars on dorsal side of tail and black tip of tail together with the grizzled brownish colouration. The impression of a desert lynx may have been elicited by its physical aspect (long limbs, short tail) and a superficial similarity by tufts on tip of the ears and by blackish face marks (lacrimal stripe).

The present specimen has no character of *F. caracal* (e.g. coat cinnamon to reddish-fawn, ears outside wholly black, long pencil on tip of ears, short face), but instead has 3–4 black half-rings on dorsal side of tail, black marks inside and on back of forelimbs, underside yellowish, all typical of *F. chaus*. The blackish coloured back of ear bears an ochre bar running across, as in *chrysomelanotis* Nehring, 1902, a synonym of *F. ch. furax* De Winton (1898). The external traits of both *F. chaus* and *F. caracal* as keyed by CORBET (1978) and illustrated (e.g. ANDERSON 1902; PRATER 1965; DORST and DANDELLOT 1970; HALTENORTH and DILLER 1977; KINGDON 1990; LE BERRE 1990) render both species easily distinguishable from each other.

The distribution in the Near East as compiled by HARRISON (1968) and HARRISON and BATES (1991) needs specification and completion, leaving aside vague and generalized information. Available records are (see Figure):

Lebanon: LORTET (1880); Tripolis (= 1st record).

Syria: HAVER (1985); Gamla 32.54.N–35.45.E, Golan (= 1st Syrian record of the present subspecies!).

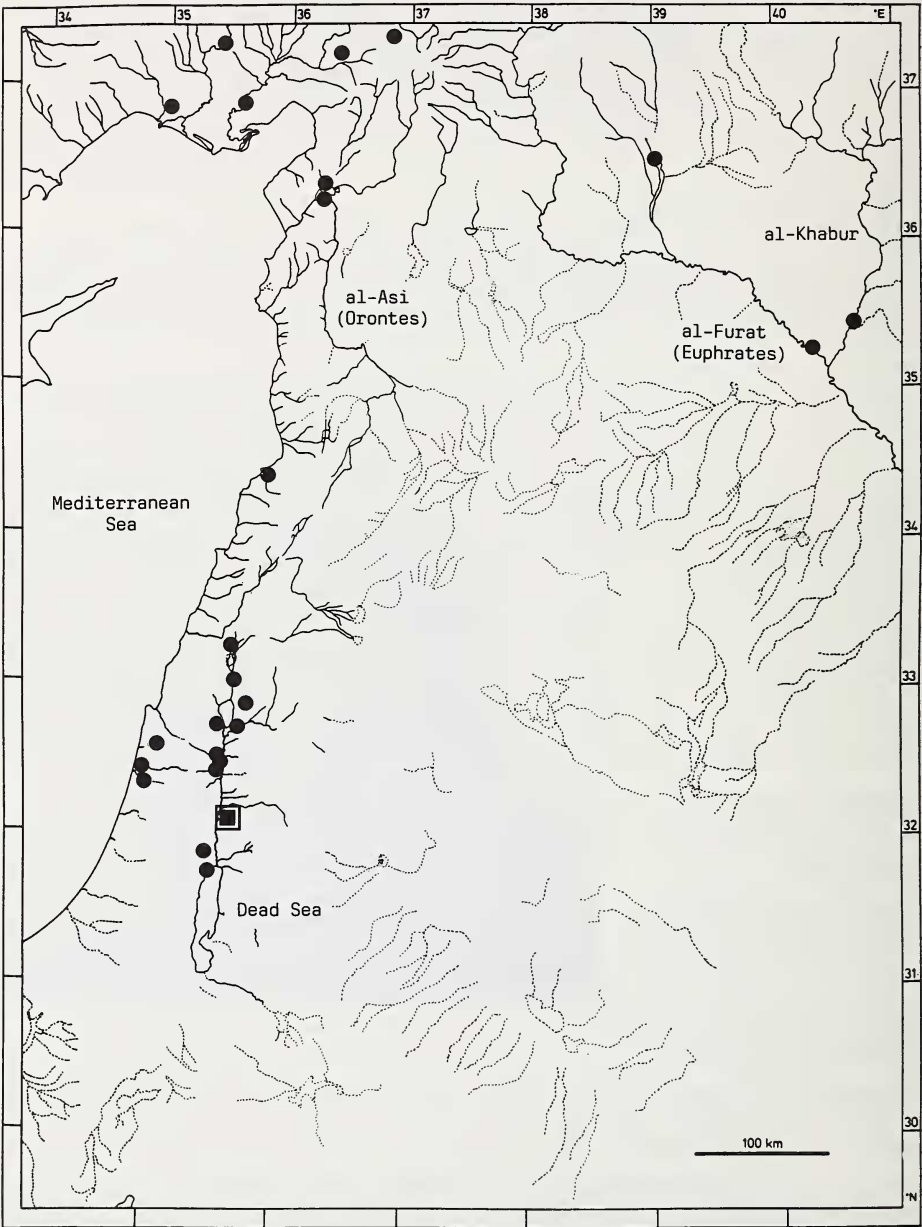
Israel: HARRISON (1968): nr. Kefar Ruppin 32.27.N–35.33.E (HZM); Hazera (HZM). ILANI and SHALMON (1983): Hula valley N-3; Moshav Ami quam H-9. ANONYMOUS (1985): SW. shore of Lake Kinneret; Jordan River Park, E. shore L. Kinneret. CHAVER (1986): springs of Yarqon River. ILANI (1986): Nahal Alexander. *Anonymous* (1990): S of Kibbutz Titrat Zvi, upper Jordan valley N-10; Kibbutz Neve Eitan N-9; Zeta winter pools on coastal plain G-10.

West Bank: DE WINTON (1898): ar-Riha (= Jericho), holotype of *F. ch. furax*. NEHRING (1902a, b): lower Jordan valley, i.e. N of Dead Sea. NEHRING (1902b): Ain Dscheir = Ain ed Dschuheijir, NW shore Dead Sea.

OSBORN and HELMY (1980) and KINGDON (1990) mention *F. chaus* for Jordan, most probably based on the oftenly cited Jericho record (West Bank), as in HARRISON (1968) and CLARKE (1977). The species has not been formally recorded from Transjordan, although NEHRING's (1902b) specimens could have been from either bank of the Jordan river. Thus the eventual discovery of *F. chaus* in Transjordan could be predicted. The

present specimen was collected near Damyeh Bridge (= Ed Damije) on the east bank of the Jordan River, Balqa Governorate, S of the Wadi Zerka confluence on the 9. Nov. 1988.

The skull of this specimen is not available for comparison. In view of the limited reference material available to us, we can hardly comment on its subspecific identity. This



Distribution of *Felis chaus furax* in the Levant; additional record = framed square, records (= black dots) for Turkey after KUMERLOEVE (1967), for Syria after HARRISON and BATES (1991), and unpublished data

is in contrast to CORBET (1978) who does not recognize any subspecies. The present specimen is less marked with black than *F. ch. nilotica* De Winton, 1898 as figured by ANDERSON (1902), but has the ochre band across the outside of ear similar, however not contrasted by a dark upper tip. We allocate it to *F. ch. furax* De Winton, 1898, typified by heavy dentition, because of very close geographic proximity. This subspecies is isolated from *nilotica* of the Nile valley and may be geographically separated in the Near East (Figure) from the population of Iraqi and Syrian Mesopotamia (= Gezira). The latter is intermediate in size of teeth to the nominate form (POCOCK 1951). Turkish populations (KUMERLOEVE 1967) are taxonomically unclassified.

Comparative material (skins only): *Felis chaus nilotica* De Winton, 1898: Egypt, "Lower Egypt", SMF 4221, 34667. *F. ch. affinis* Gray, 1830: Pakistan, Kashmir, SMF 44817; "Pakistan", SMF 65180. *F. ch. kutas* Pearson, 1832: India, Delhi, SMF 15727; Bangladesh, Modhupur Jungle, Tangail Distr., SMF 61215.

Acknowledgements

D. K. sincerely thanks Prof. A. M. DIST, Department of Biology Science, University of Jordan, Amman, and both his co-authors for their hospitality in Jordan.

References

- ANONYMOUS (1985): S.P.N.I. field study centers. *Isr. Land and Nature* 11, 21–50.
- ANDERSON, J. (1902): Mammals of Egypt: Mammalia. Revised and completed by W. E. DE WINTON. London: Hugh Rees.
- (1990): Jungle cats in groups. *Isr. Land and Nature* 16, 72.
- CHAUVER, Y. (1986): Afeq Pass at the sources of the Yaron River. *Isr. Land and Nature* 11, 140–144.
- CLARKE, J. E. (1977): A preliminary list of Jordan's mammals. Amman: Royal Soc. Conserv. Nature.
- CORBET, G. B. (1978): The mammals of the Palaearctic region: a taxonomic review. London: Brit. Mus. Nat. Hist.
- DE WINTON, W. E. (1898): *Felis chaus* and its allies. *Ann. Mag. nat. Hist.* (7) 2, 291–294.
- DORST, J.; DANDELLOT, P. (1970): A field guide to the larger mammals of Africa. London: Collins.
- HALTENORTH, TH.; DILLER, H. (1977): Säugetiere Afrikas und Madagaskars. München, Bern, Wien: BLV Verlagsges.
- HARRISON, D. L. (1968): The mammals of Arabia. Vol. 2. Carnivora, Artiodactyla, Hyracoidea. London: Ernest Benn.
- HARRISON, D. L.; BATES, P. J. J. (1991): The mammals of Arabia. 2nd ed. Sevenoaks: Harrison Zool. Mus.
- HAYER, Y. (1985): Gamla, fortress of the Golan. *Isr. Land and Nature* 11, 96–99.
- ILANI, G. (1986): More cats. *Isr. Land and Nature* 12, 38.
- ILANI, G.; SHALMON, B. (1983): Jungle cats. *Isr. Land and Nature* 9, 83.
- KINGDON, J. (1990): Arabian mammals. A natural history. Bahrain: Al Areen Wildl. Park and Res.
- KUMERLOEVE, H. (1967): Zur Verbreitungsgeschichte kleinasiatischer Raub- und Huftiere sowie einiger Großnager. *Säugetierkd. Mitt.* 15, 337–409.
- LE BERRE, M. (1990): Faune du Sahara. Vol. 2. Mammifères. Paris: Lechevalier, R. Chabaud.
- LORTET, M. (1880): Das heutige Syrien. III. *Globus* 38, 129–134.
- NEHRING, A. (1902a): Die geographische Verbreitung der Säugethiere in Palästina und Syrien. *Mitt. und Nachr. des Palästina-Ver.* 1902, 49–63.
- (1902b): Über einen neuen Sumpfluchs (*Lyncus chrysomelanotis*, n. sp.) aus Palästina. *Sitz.-Ber. Ges. naturf. Fr. Berlin* 1902, 123–128.
- OSBORN, D. L.; HELMY, I. (1980): The contemporary land mammals of Egypt (including Sinai). *Fieldiana Zoology (N.S.)* 5, 1–579.
- POCOCK, R. I. (1951): Catalogue of the genus *Felis*. London: Brit. Mus. nat. Hist.
- PRATER, S. H. (1965): The book of Indian animals. 2nd ed., Bombay: Bombay Nat. Hist. Soc., Prince Wales Mus. W. India.

Authors' addresses: Dr. DIETER KOCK, Forschungsinstitut Senckenberg, Senckenberg-Anlage 25, D-60325 Frankfurt a. M., Germany; DARWISH M. SHAFI, Yarmouk Natural History Museum, Irbid, Jordan; Dr. ZUHAI R. S. AMR, Jordan University of Science and Technology, Irbid, Jordan